

ABSTRACT OF THE DISCLOSURE

A vacuum low-temperature distilled pure water dispenser includes a water-supply tank communicating
5 with a reaction chamber via a water supply line, a pure water storage tank communicably located above the reaction chamber, an actuating pump communicably located below the reaction chamber, and a refrigerating system having pipe lines extended
10 between the reaction chamber and the pure water storage tank. When the actuating pump is actuated, a vacuum is produced in the reaction chamber to suck water in the water-supply tank into the reaction chamber, at where the sucked water is heated and vaporized by heat
15 provided by a compressor of the refrigerating system, so that impurities, organic and inorganic matters, bacteria, and viruses in the water are separated therefrom through vacuum low-temperature distillation. When the actuating pump keeps pumping, the distilled
20 water is sent from the reaction chamber into the pure water storage tank.